

AMERICAN TECHNOLOGY AND DEEP CULTURE

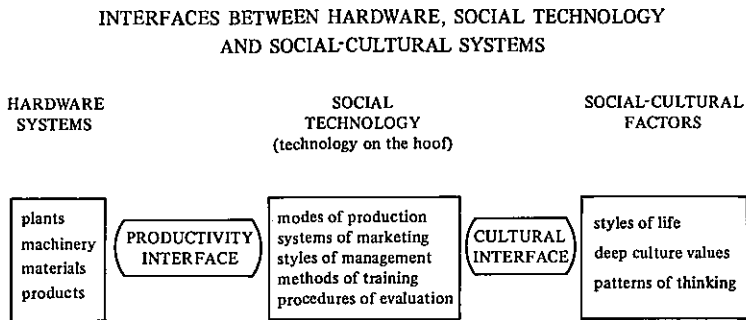
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I The Problem

American business managers working with modern technological systems make decisions in three separate areas: (1) hardware factors, (2) social technology, or human resources for production and marketing, and (3) human factors of the consumers. Typically, American businessmen give attention to the three areas in decreasing priority, but when they conduct international business, the relative importance of the priorities changes. For this reason it is necessary to look at the three areas more closely.

- (1) Hardware refers to decisions about material and mechanical aspects of production in a plant and of the product which will be marketed and used.
- (2) Social technology refers to the requirements for dedicated human resources in the process of manufacture, distribution and marketing. Modern technology requires appropriate structures of the organization, modes of production, styles of management, methods of training and of motivation, procedures of evaluation and inspection, and systems of distribution, marketing and maintenance. It is convenient to identify a productivity interface between hardware and social technology. (Figure A)
- (3) Styles of life of a people are affected by the presence of social technology and by the products and side effects of the hardware. Different kinds of productivity interfaces have different impacts on the style of life. Changes in and preferences for styles of life interact with both the productivity interface and with *deep culture*, a term we shall use to refer to the values and patterns of thinking of a

FIGURE A



people. The reciprocal interaction we shall call the *cultural interface*. (Figure A)

The basic thrust of American business since the post-colonial period has been toward the domestic market with the result that the businessman usually takes for granted the dedicated relationship between hardware and technology on the hoof (the productivity interface) and the reciprocal effects between technology and deep culture (the cultural interface). Within the American domestic market, the two interfaces may be neglected without harm, but in international business the manager copes with a different deep culture, and he or she cannot afford to disregard the two interfaces by confining decision solely to the hardware area. Two reasons at least seem to contribute to the businessman's neglect of human resources and cultural factors.

- (1) The productivity interface has been stable and dedicated for at least 150 years in the United States.
- (2) American deep culture, the values and patterns of thinking, modernized before systems of technology were developed. The changes in American deep culture have left few traces in manuals and textbooks or in memory.

A brief review of the development of physical and social technology in the United States should clarify the cultural problems met by American business in the international field.

II American Modernization

When the colonists arrived in New England, they intended to replicate to their own advantage the same class structures and system of privileges and prerogatives existing in England at the time. But conditions in the New World doomed their intent. New England communities possessed abundant land to distribute to virtually anyone who had need of it, extending greatly the status of free holders, which had existed for only a few in England, a country with scarcity of land and surplus of labor. Second, the top layer of the English aristocracy and of the church remained in England. Few of their elitist members arrived in the New World to give direction in the political, judicial and religious sectors in the colonies. Thus the middle of American class structure was expanded by elimination of both the bottom and the top layers of the English classes. Although New England communities included rank as one of the criteria for distribution of land, in practice the essential equality of all settlers produced deliberate and rational land distribution with need serving as the crucial criterion. Many positions in the political, judicial and religious sectors were filled by amateurs, while social services were provided by voluntary groups. The roles of "amateurs" and of "voluntary groups" established a pattern in American culture, leading Americans to discard decisions based on class structure, ideologies, economic theories, doctrines of the church, and in their place to substitute practicality: *ergo, if it works, it's good*. The development of this approach, later described as *pragmatism*, coincided with the emergence of another American quality, the tendency to search for a simple act in the past, a land grant for instance, that was responsible for future events. This attitude launched the American tendency to use a single economic or technical cause in the past to explain future events. The American mind thus was early attracted to technical and economic factors which work to produce desired events in the present and the future. By the 1660's the colonists in New England felt isolated in and alone with America. The past years were harsh, but the ones in front were wide open. Americans learned to place confidence in their work and products and to trust in the future.

Although land was abundant in New England, the quality of the soil was poor. Modernization began with the changes in the deep culture of New Englanders that were brought about by abundance of land but poorness of soil. Some colonists were attracted to lands in the West, while other farmers in Lynn, Massachusetts, began to specialize in the production of shoes by 1760. Those who remained on their farms were forced to struggle with the poor soil and the scarcity of labor. To survive, they converted to scientific farming and used technology to improve efficiency. (Pennsylvanian and Southern farmers lagged behind.) By 1850, the factory farm had made its appearance in the northern United States. (Brown, 1976)

As American moved west, they cut their roots with the old home sites in the same way that the new immigrants of the nineteenth and twentieth centuries cut their bonds with the home countries. The opening of the West encouraged the development of transportation and communication. People learned how to read and write and acquired a taste for inventions, practical knowledge and technology. Their cultural values of mobility, self-reliance and equality committed them to social organizations, including business, that were private and based on impersonal social relationships rather than on the primary bonds of family, clan, religion or ideology — except for the South, to a degree.

The deep culture of Americans provided the appropriate human background for the key development in modernization — the Industrial Revolution. In 1785, Oliver Evans organized the first mass production line in a grain mill near Baltimore (Larrabee, 1961), but the significant event took place in Connecticut in 1799, when Eli Whitney and Simon North organized assembly lines in their gun factory and began mass production. The innovation soon spread to the production of clocks, textile machinery and steam engines. In 1816, an American coined the term *technology*, and by 1830, the assembly line with interchangeable parts became known as the “American system” of manufacture.

Development of the steamboat reveals characteristic qualities of American culture as they are recognized today. Soon after its invention, steamboats were imported from England for use on American waterways.

By the 1830's, technical problems of precision of parts had been solved, and American industry began to mass produce steamboats powered by high pressure engines, the most up-to-date. American construction was inferior to that of the English, but Americans had already accepted the turnover of steamboats about every five years, since the art of steam navigation was making daily progress. The concern for productivity and efficiency came before the Civil War. The mass production of clocks and watches helped to implement time thrift, clearly enunciated by Benjamin Franklin, in 1748, with his famous dictum, "Remember that TIME is Money." By 1850, pocket watches were widely distributed, and Americans had used the mass-produced time pieces to organize household tasks, cottage industries and the like more efficiently and to participate in activities outside the home on time. The use of time as a control measure in managing had begun.

The reliance on labor-saving devices, on machinery built for a short life, and the fascination with inventions all characterized Americans in the pre-Civil War days. American innovations in industry and business were not at the cutting edge of new knowledge and methods from science. Instead, the orientation was toward the market and mass production, as American development emphasized systems of organization, transportation and storage.

In the period up to 1850, the South had developed a society based on self-sufficient plantations which supported an aristocracy. Although the South was more modern than Western Europe, the region lagged behind the North and West. During the 1850's the conflict in world vision between the two regions was politicized into simple, abstract and moral positions. The North stood for freedom, while the South aligned itself with tradition, loyalty and valor. (The ambiguities and crosscurrents of American political life had been simplified and abstracted once before during the days of the Revolutionary War, when the colonialists rallied under the banner of liberty.) As the years moved into the 1860's, the American genius for compromises failed to resolve the conflict between North and South, and the country went to war. Although preservation of the union and the abolition of slavery are usually seen as the major

sources of conflict, it seems clear that the Civil War also represents a conflict between societies at two different states of modernization. The rapid development of transportation and communication in the United States had made it increasingly difficult for the South to continue the cultivation of its own peculiar way of life, to maintain its self-contained economy and still live in harmony with the North. The conflict was settled by force in favor of the more modern North.

Revolutions throughout the world since the end of World War II resemble in some ways the American Civil War. All these conflicts were and are permeated by tensions between modernizing and traditional groups, defense of a way of life, and the search for cultural identity. American history supports the conclusion that the United States possesses the oldest technology in the world when we include the cultural interface as a critical component of a technological system. Modernization of American deep culture was essentially complete by the 1820's. Productivity climbed slowly until around 1950, accelerated and peaked in 1966, with rate of growth declining since then. The genius of American modernization has been in managerial and organizational innovations until the period of the Second World War, if not until the present.

Modernization began in America with cultural factors, but the quick and extraordinary implementations of hardware and innovations in technology on the hoof caught up with and surpassed the changes in deep culture. It is for these reasons that we suggest that the American attention to hardware, and neglect of human factors, is bound up with the pattern of development of business in the United States. Finally, the domestic orientation of the American businessman, in conjunction with the other two reasons, help explain why Americans are relatively insensitive to the productivity and cultural interfaces when doing business abroad. Iran, perhaps, provides the purest example of American blindness to cultural factors in doing business.

III The Case of Iran

Iran, for centuries the meeting ground for East and West, now serves

as Islam's chief testing ground for modernization. The revolutionary groups that deposed the Shah in 1979 gave to the revolution the distinctive cast of a return to Islam. In the West, American policy makers collected economic, technical and political information and ignored the cultural and social core of the revolutionary movement. American interests were compelled to rely on the Shah and his governmental apparatus to construct information and to control fast developing events. But the monarch had allowed a decisive schism to emerge in Iranian body politic, separating the governing elite from the governed, cutting off informal channels of communication to the government, and consequently satisfying one of the essential predisposing conditions for a revolution.

The roots of the revolution trace back to ancient history of Iran. Successfully conquered by Alexander, the Arabs, the Turks, Genghis Khan and Tamerlane, the Iranians have turned military defeats into cultural victories, thereby retaining a cultural identity. A Persian proverb says, "Defeat makes us invincible," illuminating the Iranian cultural character of double identity, developed in defense of the self against the Arab military victory. The individualized defense of cultural integrity against the ways of a new God, and of God's prophet and book (Forbis, 1981, 30), relied on duplicity, pretense, guile and other evasive qualities of character and of action. The double identity of Iranian character requires an ambiguous representation of reality perhaps helping explain that:

There can be no proper understanding of what underlies modern Iran unless we recognize the significance of this triumph of legend over history, or art over reality, this preference for embellishment as against unvarnished fact, for ancient folk beliefs as against new-fangled creeds. (Stevens, 1962)

Even contemporary revolutionists act as if their acculturation as Iranians can be equated in its form expression with aesthetics and social justice. Justice enters the thinking of Iranians as a leading Shi-ist concept, while the arts and the crafts occupy a privileged position in Iranian culture. In the period preceding the revolution, the poet and the author, not the editorial writer, led in the social criticism which gave form to the revolutionary forces.

The double identity of the Iranian character is foreshadowed by the Persian prophet, Zoroaster (b. 618 B.C.?), who created the native faith which imagined a cosmic struggle between light and dark, and a deep dualism of good and evil. The same duality inheres in the character of men, so it is natural to expect virtue to decline and vice to replace it. When the Arabs conquered Persia in the seventh century A.D., the creed of Zoroastrianism survived as an oral tradition, mingling with Islam and directing Iranian religious affiliation with the Shiah sect of Islam. From the stock of Iranian myth and legend, there persisted the theme of an unjust death and revenge for it, and from Zoroastrianism, the Shiah sect acquired its chief distinguishing feature, the belief in a messiah, a great "imam" who will some day appear and bring about the triumph of justice and good. (Forbis, 1981, 139-40) The double identity of the Iranian character, its parataxic predispositions, was deeply affected by embracing a faith that considers Persian history to be pagan and despicable. (Forbis, 1981, 89)

The Shiah belief holds that religion and government should be identical, and therefore the Shah's secular monarchy was illegitimate. (Forbis, 1981, 146) Furthermore, the nation's true leader exists but in hiding. The concept of the Hidden Imam dates back to 874 A.D., when the twelfth leader of the Shiites, who disappeared as a boy of four or five, interrupted the line of succession from the Prophet Mohammed through his cousin Hazrat Ali. The disappearance of the successor was eventually developed into the mystical concept of the Hidden Imam, which is the force behind faith in Iran today and was the force behind the religious opposition to the Shah. (Forbis, 1981, 140) An important precedent to the revolution of 1979 was the messianic movement of Babism, which began in 1844 and changed its character into an open socioreligious messianic revolt led by Sayyed Ali Mohammed, who claimed he was the "gate" to the Hidden Imam, and at times announced himself as the Hidden Imam. (Keddie, 1981, 49) Babism was cruelly repressed by 1851. As a socioreligious messianic revolt, it resembles other messianic movements which have occurred in other parts of the world which in part can be understood as reactions to the initial impact of the indus-

rialized West in the Third World. The effect is disruptive on handicrafts, agriculture, trade and other aspects of the country.

The Western influence in Iran severely encroached on the development of a national economy. (Forbis, 1981, 49) Beginning with concessions granted to the British in the 1850's to build an international telegraph line across Iran, the rulers of Iran established a policy of extensive concessions to Western nations which eventually formed a body of internal opposition to the Shah. The protest and revolutionary groups combined in the unusual alliance of religious and radical elements. By the end of the nineteenth century, important segments of the ulama had helped to lead popular movements against a government seen as complaisant to the encroachments of foreign imperialists. (Keddie, 1981, 33) In 1892, a basic alliance of bazaaris, ulama and modernist reformers produced a nationwide boycott on the sale and use of tobacco, forcing the government to cancel the tobacco concessions to a British foreign company. (Keddie, 1981, 67) Thus the formation of revolutionary groups that brought down the Shah in 1979 trace their origins for at least one hundred years. The bazaaris and ulama often belonged to the same families in the early nineteenth century, providing the base for forming a compatible alliance.

Protests and revolutionary plans in Iran continued during the closing decade of the nineteenth century and the beginning of the twentieth but were dampened by the presence of Russia to the north, who supported the Qajar Government of the Shah. But in 1904 the influence of the foreign factor in the internal affairs in Iran took the unusual form of Japan's providing a stimulus to revolutionary actions. The Iranians knew that the Russian government would intervene against any effort to undermine or to overthrow the Qajar Government, but when Japan decisively defeated Russia in the Russo-Japanese War of 1904, the Iranians took heart for their own revolutionary actions. They observed that the supposedly backward Japanese were the only Oriental power to have adopted a constitution, and they had defeated the dreaded Russians, the only major European power lacking a constitution. The idea took hold in Iran that a constitution is a "secret of strength," and this dis-

covery spurred them on to overthrow their own Qajar Government. In 1905, Iran entered its own constitutional revolution, which came to an end in 1911, when Russian troops marched on Teheran.

During World War I, Iran sided with the Germans, and the war brought devastation to the country. Local landowners and tribal chiefs reasserted their independence and rebuilt their power as central authority declined. Nationalist influences grew in the course of wartime uprisings and revolts, while the increase of regionalism and disunity depressed postwar social movements. By 1925, Iran was a backward country in comparison with other countries in Asia.

Modernization began in Iran suddenly in 1925 when Reza Khan, father of the Shah deposed in 1979, seized power and laid down the foundations for the modern state, avoiding dependence on Western powers. World War II intervened, and when Mohammed Reza took up the task of development in the 1950's, he departed from the policy of his father, courting dependence on Western powers, particularly the United States, in acquiring super-sophisticated and expensive weapons, developing showy projects and buying fancy consumer goods. He attempted to modernize Iran from the top down without altering existing institutions, visibly producing strong public sentiments in opposition. The Shah's efforts in modernizing relied primarily on material and social technology. Plans for modernizing agriculture called for training and education. The economic aspects of agriculture and of the countryside were neglected, while industrial growth was over-emphasized. Economic pressures placed on both peasants and laborers swelled the migration to the cities, which reportedly reached over eight per cent of the population per year in 1972-73. Along with the peasants and laborers, nomads also were sacrificed when they were resettled in agriculture or in urban slums by being deprived of their means of livelihood. (Keddie, 1981, 168) The distribution of income caused gross inequalities among groups creating a profound split between the middle and upper classes and the vast majority of the poor. To neutralize the opposition, the Shah attempted to control communication and to coopt opposing individuals with offers of good jobs in the government (Keddie, 1981, 236-42), but

events were moving quickly.

All the fatal signals of a revolution were present. Toward the end, the chaotic planning resulted in ships waiting in the Persian Gulf as much as 150 days to unload their cargo at overloaded facilities at seaports. Power failures were frequent, and other services were miserable. Traffic congestions in Teheran were memorable. Demonstrations and protests increased, inspired by the implacable opposition of Ayatollah Khomeini, which provided a refreshing refuge for all wishing to flee from a nation ineluctably moving to a breakdown. But the significance of all these signals of a coming revolution were deeply buried in deep culture, in the mystical concept of the Hidden Imam, and in the long-standing formation of revolutionary groups, combining religious, commercial and radical elements. Finally, the revolution originated in the rebellious ethos of the Shiites, reaching back to the antiquities of native beliefs, beyond the grasp or the interest of the West, and even of the Shah's governing elite. The proposition that the Iranian revolution was generated within deep culture deserves support from other regions of the world and from other movements, since the proposition is radical for the West and for Japan, committed as they are to the economic, political and technical features of modernization.

IV World-Wide Reactions

The history of modernization in the United States demonstrates the intimate link between human factors and deep culture. The tensions generated in the society undergoing modernization sometimes precipitate attacks on and rejection of technological hardware. The best known historical example is probably the Luddites in England, who rioted against the introduction of textile machines between 1811 and 1813. The United States to this day offers the example of the Amish, a peaceful religious people, who have developed closed communities that resist adopting much of modern technology. These two examples, however, conceal the major perceived threat of technology, which is not physical hardware as such but the human organization that is necessary for its maintenance. Such human techniques — what I have called technology

on the hoof — can have profoundly disturbing impacts on the deep culture of a people. The United States was fortunate that its Anglo-Saxon heritage predisposed it to absorb technology without the strains that have occurred in other countries. Scholars who have analyzed the modern personality have identified features that resemble closely the basic American character structure, and the same social scientists typically cite the United States as the best example of a modern society. The social historian Richard D. Brown concludes that the modern personality was established in all of its essentials by the 1820's in the United States. Alexis de Tocqueville, the French aristocrat who visited the United States in 1831, described the American as the new man with all the features of modernity. Modernization was uneven, however, with the South lagging behind the North and the West. The competing world visions — freedom and modernization on the one side, and tradition, loyalty and valor on the other — polarized the nation and brought on the Civil War. (Brown, 1976)

The crucial aspect of American modernization is that the deep culture of Americans modernized before the introduction of industrial production techniques. In other parts of the world, the reverse process has usually taken place. Since the Second World War, economic planners and political leaders in the less developed countries have imported advanced technology from the West to stimulate national economic and social development. The results have been disastrous when the deep culture of the country is out of joint with the social technology and style of life required by the imported hardware technology. As in Iran, the people fall back on traditional ways to protect their collective identity, to reassert their cultural meaning and to save their national pride. This cultural recession takes different forms, but in all cases the purpose seems to be to establish traditional primordial bonds that have been disrupted or threatened by the process of modernization. In Iran and throughout the Mideast, the *religion* of Islam has been the major reserve of primordial sentiments and bonds to which people have returned. In Israel, Canada and Belgium, *language* symbolizes cultural unity and division. In South Africa and to a much lesser degree in the United

States, the cultural recession has used *race* to attain cultural meaning. The American Indian and various groups in Africa and in India have tried to solidify their cultural identity within a *region*. In India and Indonesia, *customs* are carefully tended as a means of cultural identity. Finally, *ethnicity*, in the United States, the Soviet Union and parts of the Mideast, Europe, Asia and Africa, has been used to restore traditional cultural identities. The cultural sentiments sought in religion, language, race, region, customs and ethnicity provide internal bonds of solidarity that furnish the basis of political power. Ideologies are formed which help guide groups in their political and sometimes violent efforts to formulate and achieve their own economic and social objectives.

In many parts of the world, both intellectuals and lay people believe that political and social change can come about only through revolution, a violent discontinuity in the life of political and social groups. It is primarily in the Anglo-Saxon world that the belief in continuity and evolution of political and social structures still prevails. But beginning with the French Revolution of 1789, the balance of political thought in the modern world accepts revolutions with the same naturalness that Americans create a new committee, a new professional group, or a new government agency to carry out a positive program. Most groups in other parts of the world are more likely to coalesce voluntarily in opposition to another grouping, often with the purpose of attacking or destroying the target group. Voluntary groups are seldom expected to take positive actions; instead, it is the government and political parties, shaped by their ideologies, which initiate social and economic changes. The effort to politicize American society in the 1960's, and make Americans more similar to the politicized citizens of some other countries, did not succeed in producing mass-based revolutionary zeal. Americans did not flock to new parties or ideologies. Instead, the social and political pressures of the sixties raised the political influence of special interest groups and changed customs and social habits. In the same decade, in 1966, the rate of growth of productivity of the economy and the achievement of American students peaked.

V Style of Life

Economic growth during the post-war period raised the aspirations of people throughout the world to a level which could not be met by the government planners and leaders. The gap between the haves and the have nots widened and contributed to greater frustration. The wealth created by the new oil cartel has adversely influenced the developed nations and created a paradoxical situation. Third world countries have attained a greater per capita income than some of the developed countries, but their new wealth has not damaged their status in the eyes of the poor countries of the developing world. Indeed, the OPEC countries proved to the Third World that developing nations can effectively unite against the developed countries. At least two countries, Libya and Iraq, have provided covert havens for the international underground movement of terrorists. The Palestinians, struggling for international standing and for a homeland, have instilled some of the discipline and training demonstrated by terrorists. Such events present a confused world for the United States, which under Carter made human rights an ideological cornerstone of its foreign policy. Americans long ago settled their own political and economic doubts and now have little understanding of the forces unleashed by the tensions of political and economic development.

In addition, even within the boundaries of the West, the United States and Canada, Western Europe and Japan, a new factor has entered into business operations. Special interest groups, the professions and labor enjoy political and economic success, in some cases having absorbed the lessons of the 1960's. The demands of labor and of other groups, and even of some governments, are no longer entirely framed within the objectives of economic growth. Styles or quality of life has become an issue in negotiations. Japan has announced its commitment in the 1980's to improve the quality of life. A study done by Battelle, Frankfurt, concludes that the major part of German opposition to nuclear power derives from style of life and not from fear of nuclear power. The West Germans generally believe that it is possible to produce nuclear power safely, but the surveillance measures required would infringe upon or threaten their democracy. Urban Germans appear to accept the presence

of nuclear power plants, but Germans in the rural areas have opposed the appropriation of land required for construction sites. And, in the United States, U.A.W. negotiators have introduced in negotiations with management the demands for dignity of the worker. The implication of these developments is that business now deals more directly with issues of deep culture, even when supervising its own workers and managers. Not only in the United States, but throughout the developed world, business decisions are affected by people who put quality of life before purely monetary gains. Meaningful work and worthwhile identity are crucial, although not at the sacrifice of pay and salaries. The odd result of the social and educational movements of the sixties is that the social innovators and government officers who administer the social improvement projects are well rewarded, whereas their projects accomplish little to improve the welfare of their clients. The same group of social innovators and managers have adapted their rhetoric of human rights, which has penetrated both the domestic scene and the foreign policy of the United States.

The polarization of human rights and oppression traces back to the Civil War. Previous to that time, the freedom slogans applied only to white, adult, male, propertied Christians, but they were later extended to include black slaves, and in contemporary times, refer to Hispanics, Orientals and other groups in the society. The civil rights movement, however, condensed around the human rights of blacks, who, as a group, have often been the focus of issues of justice for minorities, equal opportunity in education, and cultural priorities, thereby creating tensions in the society with other ethnic and racial groups. Cultural strains are symbolized as human rights of race, religion, ethnicity, language, custom and religion. The concerns in the society with these issues probably contribute to the decline in the rate of growth of productivity, functioning as a general background factor.

It should be said that the concern with style of life and with ecological questions has spread in the developed world, as a result of affluence and economic success. But the spread is not world-wide, since technologies and products which have been banned in the United States have

been exported to some third world countries which have embraced technology without heed for style of life or deep culture. The latest is China, which has turned aside warnings received from visiting American scientists about the threat to culture of embracing technology without considering its indirect effects. This suggests that United States business cannot rely solely on the judgement of the Third World to prevent business operations from disintegrating under the political forces of groups advocating preservation of or return to traditional style of life and deep culture, sometimes by revolutionary means.

VI Consequences for Business

The political and cultural tensions of the last twenty years have produced uncertain business policies from the American government. In the domestic scene, the government sometimes regulates, at times supports, and on occasion exploits business as an adversary. The result is fuzzy guidelines for business to follow to prevent government intervention or to direct this intervention to serve business interests. Abroad, there is the additional factor of cultural differences. The climate for international business turns even more complex when political, social and cultural factors intrude more frequently now than in the past.

Some businessmen have remarked that American supremacy in business was established by the lack of competition from other countries rather than by superior American capability. Whatever may have been the reasons for post-World War II American monopoly, this period is ended. The United States made up one half of the capitalist world economy in 1945, but by 1980 the American percentage has dropped to about one third, and all forecasts predict a continued shrinking of the American share. Complicating the international picture is the fact that American allies in security and foreign affairs are the major competitors in business and commerce. The United States cannot expect its major allies to follow its uncertain foreign policy when they simultaneously suffer economic losses, as with the economic sanctions against Iran, or more recently Poland. The complexities of the modern business world may be summarized in part by the following points:

- (1) American industry has lost its overwhelming edge in business and can anticipate stiff competition, particularly from the Japanese.
- (2) American rate of growth in productivity peaked in 1966 and has slackened since that time.
- (3) The quality of American products appears to have declined, with the Japanese showing better quality control than Americans.
- (4) The assumptions undergirding American economy — of unlimited resources, cheap sources of energy and unlimited markets — must be revised to fit the realities of the contemporary scene.
- (5) The condition of the economy cannot be entirely explained by any of the traditional four *simple* and *technical* explanations, which are the following: deficit spending by the federal government, growth of the money supply, excess demands for goods and services overheating the economy, and wages rising faster than productivity. (Solow, 1980)
- (6) Americans persist in a self image of No. 1, still searching for greatness and leadership in a world that has reduced American influence in business and diplomacy.
- (7) Social and cultural movements of the 1960's have affected the work and management forces, particularly in government, changing the *work ethic* to a *job ethic*, in which the right to benefits and careers is associated with job possession rather than with work performance. Even poor persons insist on a "decent" job. Similarly, among many employers, credentials have become more important relative to performance.
- (8) Rewards for job occupancy include intangible qualities defined as style of life that fall outside measurements of income or of GNP.
- (9) American expectations of increasing GNP, progress and quality of life must adjust to the concept of cycles in which the economy and its vital measurements *undevelop* rather than develop, as in New York City, and abroad, in Uruguay and Argentina.
- (10) All of the above factors can be interpreted to correlate with changes in the cultural and productivity interfaces in American business. In international business, the major factors working against techno-

logy can be identified as strains in the cultural interface. Natural developments and improvements of social technology have separated managers and their employees. Remote, abstract and analytical social technology in styles of management have made managing an arid art remote from the realities of quality control, production and market. A reasonably distant future has shrunk nearer to the present to serve the obsession of short term profits and gains. Managing approaches are out of touch with the values, patterns of thinking and styles of life of many employees. Finally, management has failed to accommodate to the changing values of its employees.

VII Response from American International Business

The recommendations to be drawn from the preceding sections are general but straightforward.

- (1) Introduce concepts of culture into planning processes.
- (2) Redesign hardware systems and technology on the hoof so that the productivity interface will be more efficient in a given culture. (Japanese technology on the hoof provides ample examples of alternatives which American business could adopt at certain sites where the change would be likely to contribute to greater efficiency.)
- (3) Use analytical concepts of culture and society in order to focus on the effects on life style and deep culture of hardware systems, particularly new products. Use similar concepts to better understand and anticipate consequences of technology on the hoof. Redesign social technology and products to improve the cultural interface.
- (4) Introduce "intercultural managing" as a separate set of skills alongside conventional managing.
- (5) Develop criteria for evaluating intercultural managing and introduce the category into a system for evaluating managers. Double or triple the period of time covered by an evaluation.
- (6) Develop programs of training, education and instruction from existing content, using method and materials in intercultural communication to carry out points (1) through (5).

These recommendations stand for a changed orientation in business,

moving away from reliance solely on hardware or social technology. Planning and management become more complex with the addition of a cultural dimension, but perhaps the complexity itself will provide opportunities concealed by attitudes of the supremacy of American technology. The dimension of culture represents a response to actual developments in the business climate of recent years. In view of the problems hampering American technology, and the competition from other nations, American business needs every advantage it can get. Redesigning the productivity and cultural interfaces will not give American technology a new cutting surface, but it might give the old surface the new edge that it needs.

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アメリカ的手法と深層文化

〈要 約〉

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アメリカの経営者は、^{ソーシャル・テクノロジー}民的手法を重視して決定を下す。この手法は、作業過程や組織内の人的配置に工夫をこらすことにより生産活動の能率を最大化しようとするものであるが、同時に人的・文化的要因の影響を最小化するものでもあり、それ故に海外のアメリカ人経営者は異質な社会や状況における適応力を欠くことになる。アメリカ的手法が柔軟性を欠く主たる理由は、近代化を達成する以前の段階で、すでに1820年頃には文化的変容が成し遂げられていたという歴史的事実にあるが、このことはアメリカ人にはあまり認識されていない。このような、文化と民的手法との間の関係に対する盲点の故に、文化的・社会的体制を変えることなく近代化を達成しようと試みたところに問題を見出したイラン革命の文化的^{ルーツ}原因を見落としてしまうこととなった。似たような方法による近代化が、言語・宗教・道徳・習俗や伝説等の伝統的結束に立ち帰ろうとすることにより試みられた。イランの宗教への回帰は、1970年代後半に革命の徴候が明確になってからもアメリカ人によって無視され、それ故民的手法に固執し文化的要因を無視することから、アメリカ人経営者は他の地域同様大きな損失を被ることとなった。経営者による企画政策決定過程において、文化的情報を十分考慮に入れることが、将来強く要請されているのである。